U.S. Department of Transportation
Federal Transit Administration

Paul S. Sarbanes Transit in Parks Program (Transit in the Parks Program)
Project Proposal for Fiscal Year 2010 Funds – Planning Project

BASIC PROJECT INFORMATION	
Project Name (Please provide a 1-2 sentence description of the project): Programmatic assessment and guidance of transit expansion opportunities on the National Forests of California.	
Proposed Funding Recipient: USDA Forest Service, Pacific Southwest Region	
Public land unit(s) involved: 18 National Forests of California	Location of Project City: Vallejo County: Solano State: California Congressional District: All in CA
Federal Land Management Agency managing the above unit(s): ☐ Bureau of Land Management ☐ Bureau of Reclamation ☐ Fish and Wildlife Service ☒ Forest Service ☐ National Park Service ☐ Other (e.g. Federal Trust) Describe:	Type of Planning Project: (Implementation projects, please use the alternate form) ☒ Planning
☒ Proposal is to plan for a possible new alternative transportation system where none currently exists. ☒ Proposal is to plan for a possible expansion or enhancement of an existing alternative transportation system.	
Transit in Parks Program Funding Requested during FY 2010 $490,000	**Total** Cost of Planning Project at Completion (All sources) $490,000
Were you awarded Transit in Parks Program funds for this project in the past? ☐ Yes ☒ No If answer "Yes," please provide amount awarded: $	
Do you plan to request additional Transit in Parks Program funds in future years? ☐ Yes ☒ No **(Note: If you wish to compete for future Transit in Parks Program fiscal year funds you must reapply).** If answer "Yes," please specify Transit in Parks Program proposed funding levels for out years below:	

FY 2010 $	FY 2011 $	FY 2012 $

FY 2010 Funding Amounts from sources other than Transit in Parks Program funds? ☐ Yes ☒ No If answer "Yes," please specify funding levels per source below:			
State $	Local $	Federal (other than Transit in Parks Program) $	Private sources $

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OTHER PROJECT SPONSORS (in addition to funding recipient)

REQUIREMENTS
☒ If a State, Tribal, or local government entity is proposing the project, the applicant has contacted the manager of the Federal land unit(s) and has the consent of the Federal land management agency or agencies affected. ☒ The project is consistent with the metropolitan and statewide planning process. ☒ The project is consistent with agency plans. ☒ The planning project will analyze all reasonable alternatives, including a non-construction option.

BASIC PROJECT DATA	
Number of Visitors (Annual): 28,702,000 (visits/yr)	Daily Number of Visitors (Peak season): **n/a**
Average Number of Vehicles per Day at Peak Visitation: **n/a**	
Current Road Level of Service at Peak Visitation: **n/a** (Please consult guidance where available on determining this variable. You may use observational accounts or pictures to provide an assessment of this datum for FY 2010 proposals).	
What time of the year does your land unit experience Peak Visitation? ☒ Spring ☒ Summer ☒ Fall ☒ Winter	
Current Carrying Capacity of Existing Roads: **n/a** (vehicles/day)	
What percent of that capacity is the site operating at during peak periods? **n/a** %	
Current parking shortages during peak visitation: **n/a**	
Current Number of Persons who use the alternative transportation system (if one already exists) at peak visitation: **n/a** (average number of visitors/daily at peak)	
Estimated Annual Number of Persons who will use the alternative transportation system at project completion: **n/a** (anticipated number of riders or users/annually)	
Average number of auto collisions with wildlife in the area? **n/a** collisions/year	

Executive Summary

The National Forests of California represent an amazing and diverse array of ecosystems, resources and recreation opportunities; these public lands are visited by more than 28 million times each year (USDA NVUM National Summary Report, 2007). Several National Forests within the Region (Forest Service Region 5) have been working to expand transit services onto public lands through the TRIP program, and have had great successes to show for their efforts. These new and expanded alternative transit services (ATS) are quickly becoming the backbone for accessing key public lands and are becoming a significant consideration for the future. Improving mobility of the visiting public, protecting resources, and serving broader groups of stakeholders are management topics that the National Forests of California are working hard to improve. With the social pressures placed on these National Forest System (NFS) lands from California's growing population, looking to ATS as a means of access will become an important future trend. In order to remain proactive in this endeavor, the Forest Service in Region 5 is proposing to conduct a broad-scale analysis across the Forests in California to assess the potential of future ATS.

This proposed project is a "pilot project" designed to complete an assessment at a broad regional level of the potential for transit and other "active transportation" related improvements on public lands. Similar to metropolitan planning efforts, this project includes an extensive inventory of existing information to help identify specific transit nodes, routes, and areas (a.k.a. "hot spots") that warrant further study and/or expansion. With no course-scale studies to rely upon, this project will be the first of its kind to look broadly across federal public lands to develop recommendation about potential opportunities. This effort can be viewed as a precursor to the use of a Transportation Assistance Group (TAG) for a specific area or National Forest, providing broad programmatic direction and recommendations that will catalyze individual Forests to begin planning for ATS.

In the spirit of improving the livability of American's lives and providing improved access to public lands of California, this proposal includes a coarse review and evaluation of ATS expansion opportunities of all National Forests in California (Pacific Southwest Region of the Forest Service, Region 5). It will focus on gathering information to sufficiently determine potential routes, nodes, and areas for further study, identify potential partnerships, propose potential funding strategies, and make recommendations about the needs associated with connecting a new ATS to existing and/or planned interregional transit systems. In addition, it will produce a report that highlights results of a complete survey of existing studies and literature relating to transit on the National Forest System (NFS) Lands in California. Finally, this effort will prioritize specific linkages for additional resources and funding.

The scope of work will focus on the all NFS lands of Region 5. While basic considerations will be made across all of the approximately 20-million acres of NFS in California, a more detailed look will be made in the following areas:

- Along National Forest, State, or National Scenic Byways
- Adjacent to the State and National Parks (or other public land recreation destinations)
- Along State Routes and other major routes leading to National Forests
- On routes leading to Ski Areas and other popular recreation areas

This large-scale planning effort is necessary to determine specific hot spots for further transit consideration, study, and improvements. It will assemble detailed information to guide the development of the additional linkages within the system to complete the network of alternative transportation across the NFS lands in California. The key elements of this effort include gathering data, leading discussions with stakeholders, and assessing local or regional ATS for potential expansion to key recreation destinations on NFS lands. The analysis will look at opportunities to link to city, county, regional and interregional transportation systems such as YARTS (Yosemite Area Regional Transportation System). Additionally, it will recommend potential timing and priority, further study needs, and potential partners and funding, and will also identify the responsible entities to lead the effort, supporting agencies, and key considerations.

Project Description

This grant will fund a broad transportation study across the National Forests of California. It will include the collection of existing data, analysis, and recommendation of future transit expansion on NFS lands. This project is geared toward the support of future transportation improvements and will guide potential future collaboration of transit projects including feasibility studies, grant applications, and actual transit expansion and implementation efforts. This project will yield broad programmatic advice to guide individual Forests in further pursuing expanded ATS on recommended routes.

This project will be completed in three primary phases, and will be conducted across three geographic units of California. The Central Sierra area will be the first to be assessed. The geographic Northern and Southern areas of the state will follow based upon interest and availability of staff, partners, and stakeholders. While the National Forests (managing the largest acreage of public lands) will play a lead role, it is anticipated that other public land agencies will also provide information supporting this project's advancement. By creating an "all areas and all agency" framework for further transit consideration, study, and development, a new paradigm for transit-related improvement will be produced.

The project will begin with the collection and synthesis of existing information focusing on four primary areas: use data and demographics; local and regional transit program data and plans; Land and Resource Management Plans of public agencies; and partnership and sustainable-funding opportunities. Data mining will include National Visitor Use Monitoring (NVUM) data and other relevant agency studies, as well as California State Parks (including findings in the recent Statewide Comprehensive Outdoor Recreation Plan), National Park Service, and other local and municipal entities. Following the development of a preliminary list of high priority routes for further transit study and/or development, stakeholders will have an opportunity to examine results and make comments.

The last phase of this effort includes the completion of a report that documents the findings and recommendations, and this report is anticipated to be used as a basis for future site-specific ATS development. This phase will also include the step of working with Federal Highways Administration and other agency staff to review preliminary findings and expand the discussion of future possibilities. Each will also have further refinement of "next steps," which is anticipated to include a rough schedule for gathering needed data, a proposed grant application list, key partnerships for development, and suggested implementation timeline. It is expected that this will also serve as an overarching master development plan and timetable for additional TRIP planning and implementation grants in future years.

Before the final phase of report writing and project documentation is complete, a portion of the funding will be specifically used to engage local and regional transportation authorities in the discussion of these potential new routes. Staff from the Regional Office (with support from transit planning staff on the Inyo National Forest) will lead this effort to connect with these and other partners. In addition, contract support with the Sarbanes TAC or Volpe Center is anticipated to ensure that these stakeholder discussions support meaningful review and comment on the draft report findings. This will include phone and in-person discussions, convening meetings, hosting brainstorming sessions, assembling information, producing planning materials such as maps and diagrams, as well as maintaining interest along specific nodes until this planning effort is complete.

With a new emphasis focused on identifying an ATS and other "active transportation" alternatives, the National Forests of California are looking to begin the effort to improve visitor mobility, the protection of natural and cultural resources, and broaden the connections to regional transportation for the least expense. Ultimately, the end product of this endeavor will serve as a basis upon which the National Forests of California and their local/regional partners will rely for technical, logistical, temporal, and fiscal guidance in the future study and implementation of an expanded ATS across California. With the completion of the final phase, it is expected that the proposed project document will serve to guide the future actions of the various Forests and their partners in the improvement of alternate transportation across the public NFS lands of California.

Alternative Transportation in the Parks and Public Lands
Planning Evaluation Criteria

(There are separate evaluation factors for implementation projects. Use the implementation project proposal template for implementation projects.)

Criteria	Points	Weight
1. Demonstration of Need		50%
a. Visitor mobility & experience	(1-5)	
b. Environmental condition as result of existing transportation system	(1-5)	
2. Methodology for Assessing: Visitor Mobility & Experience Benefits of Project		15%
a. Reduced traffic congestion	(1-5)	
b. Enhanced visitor mobility, accessibility, and safety	(1-5)	
c. Improved visitor education, recreation, and health benefits	(1-5)	
3. Methodology for Assessing: Environmental Benefits of Project		15%
a. Protection of sensitive natural, cultural, and historical resources	(1-5)	
b. Reduced pollution	(1-5)	
4. Methodology for Assessing: Operational Efficiency and Financial Sustainability of Alternatives		20%
a. Effectiveness in meeting management goals	(1-5)	
b. Financial plan and cost effectiveness	(1-5)	
c. Cost effectiveness	(1-5)	
d. Partnerships and funding from other sources	(1-5)	

Planning Justification
Your responses to these questions must total no more than eight pages.

1. Demonstration of Need

a. Visitor mobility and experience:

"One in eight Americans call California home. Although California's historically high rates of growth have mellowed into a more modest 1.1 to 1.2 percent annually in recent years, the state is still projected to add 1.3 million people during the 3-year period between 2008 and 2010" (California Legislative Analyst, n.d.). As a result, the National Forests of California together represent some of the most heavily visited public lands in the country. Many of these lands are located immediately adjacent to rapidly expanding urban centers, and receive thousands of visits each day. In the southern portion of California, NFS lands are viewed as large regional "parks," with city sprawl and encroachment occurring right up to the public-private land boundary.

Even areas located significant distances from major metropolitan areas are recognized for their significant public use and the associated need for transit services. As an example, "The Eastern Sierra Expanded Transit System service area serves international, U.S., as well as regional and local Nevada and California visitors to the various attractions in and adjacent to the Inyo National Forest" (Field Report: Eastern Sierra Expanded Transit System, Federal Transit Administration, 2004). While the Inyo National Forest is the most visited National Forest in California, it takes more than 5 hours of driving from the primary location of most of its visitors. Even so, the market projections for growth in visitation for that Forest alone includes an additional 98,000 visits per/year that can be expected each year for the next 20 years (U.S. Forest Service Recreation Facility Analysis, 2007). This will increase the number of recreation visits on the Inyo National Forest from nearly 4 million visits to over 6 million

recreation visits each year. Similar demographics and use statistics, along with associated projections can be found on other Forests within Region 5.

Highly successful transportation services have been developed to accommodate this expanding use of California's NFS lands. Still yet, many areas within the Region are already at or exceeding their transportation capacity. A number of small scale transportation systems have been implemented to alleviate capacity problems, like on the Inyo National Forest, which include several small systems like those operated in partnership with the Town of Mammoth Lakes in the Lakes Basin, Inyo-Mono Transit in Inyo and Mono Counties, and with the local Transit Authority at Reds Meadow Valley/Devils Postpile National Monument. On the Inyo alone, annual combined ridership for these systems is estimated at over 400,000 riders (based on 2009 ridership counts). The Yosemite Area Regional Transportation System (YARTS), which is another transit operation in the general area, has provided an alternative to driving to over 515,000 riders traveling in the Yosemite Region.(www.yarts.com) Still, many areas of the region continue to experience daily parking problems, traffic congestion, and resource impacts associated with overcrowding.

Many sites throughout the National Forests of California are witnessing traffic and capacity impacts during the peak use seasons. Transportation options to most of these popular destinations are currently limited to automobile travel, emphasizing the use of parking lots in close proximity to resources as a means of access. Even "active transportation" options are limited as a result of the remoteness of many places. Similar to conditions on the "east side" of the Sierra's, the growing popularity of public lands is causing a swell in use along the U.S. 395 corridor; ultimately increasing the strain already placed on overcrowded parking infrastructure. And when travel time can be as much as 30 minutes to an hour to simply reach parking areas, visitors often experience serious frustration when they arrive at their destination with the prospect of no parking.

These examples from just a few specific sites illustrate the incredible need and opportunity for change. While there is no comprehensive study to cite which references all aspects of visitor mobility and experience needs, the previously mentioned cases highlight just a small portion of the specific issues facing many of the National Forests. The same is true of State and National Parks as well as local and regional public land management agencies.

b. Environmental condition as a result of the existing transportation system:

Detailed study of specific sites is necessary to determine the actual conditions of any individual transportation system identified in this effort. In consideration of the examples of public land transit operations currently running in the National Forests of California, a great deal can be assumed based upon professional judgment. First, it is likely that the capacity of specific recreation and parking sites has been compromised as a result of increasing visitation. With many and/or most facilities designed in the 1950s and 60s, design standards and use volumes almost certainly have been clearly exceeded.

California continues to experience staggering rates of growth, with population levels predicted to increase by 500,000 annually (Fulton, William and Shigley, Paul. *Guide to California Planning*, 2005). The National Forests in California reflect similar trends. An increase in visitation correlates directly with an increase in vehicle congestion. Parking shortages encourage visitors to park where they otherwise would not, resulting in damage to native vegetation as well as soil compaction and corresponding increases in water run-off. The range of environmental conditions present on public lands related to this congestion is wide, but clear examples are present illustrating impacts to watershed resources, wildlife, water quality, plants, and other species on public lands. As just a single example, all across the state, there are plenty of incidents each year where motorists have collisions and kill migrating deer.

As visitors hunt for parking spaces in idling cars, emissions and noise pollution generated by vehicles inundate the region. While a single, isolated trailhead or day-use area may contribute marginally to air quality and natural soundscape problems, the traffic congestion at hundreds of recreation sites on

more than 20 million acres National Forest collectively represents a substantial impact to these resources. On the Inyo National Forest alone, an estimated 1.5 million vehicles access recreation sites each year. Although specific data is not available for emissions factors for the National Forest System lands of California, this plan will broadly consider current air quality baselines with assistance from Air Pollution Control Districts in the State.

Scope of Work and Methodology

This project will be completed in three primary phases, and will be conducted across three geographic units of California. Beginning in the central portion of the state (approximately Interstate 80 south to State route 58); the "Central Sierra" zone will be the first to be assessed. Both Northern and Southern areas will follow, and priority will be based upon local interest and the availability of staff, partners, and stakeholders. The National Forests of California will play a lead role in this projects completion, but will also include other public land agencies. An "all areas and all agency" framework for further transit development will ensure interagency support and establish a new paradigm for transit related improvements..

The following specific tasks are anticipated to be completed as part of this project:

- Assess and identify potential "hot spots" for further transit study and/or development
    - Assemble and review existing information
    - Identify agency and stakeholder partners for each route or area
    - Develop "all agency" goals and objectives specific to each route
- Develop a framework for further collaboration for each potential transit expansion opportunity
- Prioritize routes, nodes, and areas within a broad geographic context
- Recommend data needs and/or next steps for each route
- Engage stakeholders in review of draft findings

The first phase of this effort will begin with the collection and synthesis of existing information. The gathered data will compose four primary area; use data & demographics, local and regional transit program data and plans, Land Management Plans of public agencies, and partnership and sustainable funding opportunities. Both presence and absence of related data will be used to assess future information needs and will serve to assist in the identification of priority areas (transit routes and associated nodes). The second phase of this proposal consists of an assessment of routes, areas, and nodes valuable for further study and/or transit service expansion based upon potential partner and funding opportunities. The last phase of this effort includes the completion of a report that documents the findings and recommendations, and this report is anticipated to be used as a basis for future site specific ATS development.

Of the data and plans gathered as part of phase one, the "use and demographic data" will serve as the backbone of information for the initial effort to identify potential transit linkages across the NFS in California. Data mining will include Forest Service information such as the National Visitor Use Monitoring (NVUM) data and other relevant Agency studies of visitors to the public lands. In addition, this literature and data review will also extend to sources outside the Forest Service including California State Parks (such as SCORP), National Park Service, and other local and municipal entities. Because a meticulous analysis (related directly to transit development) has yet to be fully made within these (and other) data sources, it is unknown if it will be helpful or not. Where data supports the idea that use/visitation and demographics support the need & use of alternate transportation, precise assemblages and more detailed data gathering will be conducted.

Additionally, phase one will also include an assessment of information and data needs. Specifically, where little or no information exists, recommendations will be made about the type, importance, and relative need for additional data. Where information gaps exist that need to be filled to complete this project, a limited amount of new data may be gathered using techniques such as small professional charettes or focus groups. It is not anticipated that visitor surveys would be conducted as part of this project; however they would likely be recommended as additional study needs (in specific areas). It is expected that a detailed recommendation about technical information requirements such as visitor

surveys, primary data collection, schedules, headway, potential routes, frequency, vehicle types, and the myriad of environmental impacts related to traffic congestion for specific sites would be included in the recommendation to gather new information.

The second area of data to be gathered includes local and regional transit plans and associated data. Specifically, an examination of relevant transit studies and plans will be completed. An important component of this project is the recommendation of future study needs for specific transit nodes. As such, an important step will be to identify and connect relevant area transportation plans for the "hot spots." For priority routes/nodes, efforts will be made to connect future ATS planning with existing transit planning data and short/long range planning documents. Sources of this information is anticipated to include such things as transportation analysis documents, transit plans, land and resource management plans, general plans, annual and strategic reports, Federal Highways Administration field reports, and other related plans and reports.

Upon the assembly and assessment of the existing information, phase two will begin to sort out possible ATS development opportunities. Based on the (above mentioned) sources of information, it is anticipated that a preliminary list of high priority routes/areas will be identified for further transit study and/or development. Each of the high priority routes/areas will also be assessed for their potential to connect with an existing local or regional transit system. An investigation of potential local partnerships and funding will then be made. This analysis will include discussions with local Forest staff, local ATS providers, and other key stakeholders, and this phase will include the step of working with Federal Highways Administration Staff to review preliminary findings.

Each of the recommended future transit routes will next steps identified, including a rough schedule for gathering needed data, a timeline for proposed grant application list, key partnerships for development, and suggested implementation timeline. It is expected that this will also serve as an overarching master development plan and timetable for additional TRIP planning and implementation grants in future years.

An important component of this grant will also include the coordination and collaboration between the various transit entities that may be affected by the recommendations. Before the final phase of report writing and project documentation is complete, a portion of the funding will be specifically used to engage local and regional transportation authorities in the discussion of these potential new routes. Staff from the Regional Office (with support from transit planning staff on the Inyo National Forest) will lead this effort to connect with these and other partners. In addition, contract support with the Sarbanes TAC or Volpe Center is anticipated to ensure that these stakeholder discussions support meaningful review and comment on the draft report findings. The associated work could include phone and in person discussions, convening meetings, hosting brainstorming sessions, assembling information, producing planning materials such as maps and diagrams, as well as maintaining interest along specific nodes until this planning effort is complete.

Lastly, as a result of the high technical needs of a proposal of this nature, it is also anticipated that planning funds received from this TRIP proposal may be used to retain the services of a professional transportation consulting firm. While the Forest Service in Region 5 has used the TRIP and other programs to recruit expertise in alternative transit planning, these firms expertise has been (and will continue to be) invaluable. Based on prior transit studies and field reports, engaging independent transportation consultants like these is anticipated to be necessary to ensure technical accuracy and will be critical to the success and sustainability of an ATS. This project is expected to be a collaborative effort with one or more of these centers throughout the life of this project.

Over a three year project completion timeline, funding requested in this proposal will include staff time for a dedicated Forest Service regional community (transportation) planner (est. $300,000), travel and meeting hosting (est. $35,000), support to individual National Forests for data gathering and review (est. $40,000), document production and materials (est. $25,000), agreements with partner agencies (est. $15,000) and contracts with transit planning firms (est. $75,000). While these are rough estimates, the scope of this work is anticipated to require the above funding to complete this project.

2. Methodology for Assessing - Visitor Mobility & Experience Benefits of Project

a. Reduced traffic congestion:

A primary objective in this planning effort is the reduction in overcrowding, gridlock, and traffic delays associated with traffic congestion at National Forest recreation sites. By orchestrating a comprehensive, integrated approach to examining transit solutions for popular National Forest recreation destinations, the transportation planning study will develop solutions appropriate for specific sites within a wider, regional context.

By assembling existing data, such as traffic counts, vehicle trips, passengers per vehicle, duration of stay, and traffic patterns, land managers and transit planners will begin to understand the magnitude of traffic congestion experienced within the regional planning areas. This information will then inform the development of alternatives to address the varying degrees of traffic congestion at more specific locations within the regional planning area. Finally, this study will identify goals and objectives for each potentially new transit route or improvement, and in doing so, also establish specific metrics for determining overall reductions in congestion. All of this information together will be used as a baseline to measure future conditions against.

In addition to assembling primary data, a professional charette or focus group may be used to further refine potential new transit opportunities and identify specific transit nodes or routes for expansion. Through this effort, discussion of visitor use patterns and corresponding transportation needs may also lead to further metrics for assessing program success. Although each site must be analyzed for its individual trends and management concerns, this broad study will provide initial recommendations and define the nexus between each of these sites and how a transit solution at one can directly affect the other. By successfully integrating alternative transportation systems within the National Forests of California and the greater regional transit system, traffic congestion can be addressed throughout the entire service area as opposed to at just a few isolated sites.

b. Enhanced visitor mobility, accessibility, and safety:

“Increasing numbers of people are coming to the National Forests for a growing number of activities. There are increased demands for a variety of high quality year-round recreation opportunities, especially day-use activities including picnicking, driving and trail use, as well as access to dispersed areas where people recreate… In the past, outdoor recreation participation has dropped significantly after age 65, but for California’s baby boomers, “the outdoors has been an important extension of the California lifestyle, and they are likely to carry this attitude forward into retirement”” (www.americantrails.org)

This project will play a key role in providing enhances opportunities for the public, and especially these changing demographics. Following the review of relevant Land Management Plans, opportunities for focused improvements to visitor mobility will be identified for each of the 18 National Forests in California. For the high priority routes (i.e. “hot spots” transit development), further refinement and specific proposals will be included in the final report. In addition, the collaboration and review of other agency management plans and transportation planning documents will highlight further opportunities. Together, they will serve as a baseline to measure against upon successful implementation of specific transit projects.

Ultimately, this effort will directly lead to the establishment of priority areas for further transit consideration with clear goals and objectives established to enhance visitor mobility, accessibility, and safety. Unfortunately, statistics illustrating the number of disabled or elderly individuals who recreate on the National Forests in California is not available. The US Census Bureau statistics, however, reveal that the elderly and disabled account for 12% of the state’s overall population. Site specific metrics will be developed upon further study of priority routes, areas, and routes.

c. Improved visitor education, recreation, and health benefits:

Many of the sites that will be considered as part of this project are immediately adjacent to popular recreation areas or trails. Over the last decade, the National Forests in California have demonstrated regional and national leadership in the area of expanding visitor education and recreation programs. With hundreds of sites, including visitor centers and trails, the Forest Service in California has a serious commitment to improving visitor information and education. Additionally, the State and National Parks within California also play a key role in providing recreation opportunities and are having a positive impact in this area. Though not a primary focus of this project, education, recreation, and health benefits will be identified as part of this effort. Specific methods for assessing improvements will be completed on a site by site basis, and will focus on the individual opportunities available for each new transit route or area.

3. Methodology for Assessing - Environmental Benefits of Project

a. Protection of sensitive natural, cultural, and historical resources:

Transportation related impacts are growing across California. With an ever increasing population, public lands such as the National Forests are serving the growing demand for recreation opportunities. Using again the Inyo NF as an example, an astounding 95% of the visitors are arriving to the area via private motor vehicle (INF TAG Report, 2007). The market projections for growth of visitation on some other National Forests in California are similar. All of the Forests in the State are expected increases over the next two decades. This will directly translate to more private motor vehicles. The current existing transportation system is not expected to be able to accommodate the visitation demands and will likely result in significant impacts on the region's sensitive natural, cultural, and historic resources.

This study will gather data necessary to develop a baseline assessment of vehicle use and traffic, and will identify future transit opportunities across the entire planning area. This will serve as the basis for necessary capacity analysis to consider the effects of this growing use. One of the main objectives of this planning effort is to identify opportunities to design a transportation system that would reduce the potential impacts to these resources, thereby enhancing the quality of the recreation experience in the National Forests of California. With the protection of these resources being one of the main issues driving the need for enhanced visitor management, this broad scale planning effort would analyze the existing condition and outline a desired condition for these various environmental resources.

b. Reduced pollution:

As has been shown in many different transit operations, the development of ATS has a profound effect on air quality. One operation in the National Forests of California, the Reds Meadow Shuttle, is estimated to reduce the use of approximately 25,730 gallons of fuel and 460,000 lbs of CO2. There is no way to estimate either the current or future motor vehicle related pollution across the entire planning region at this time, however this grant will support the development of this information. While specific areas have accurate reports depicting the pollution reductions associated with the ATS, this data is incomplete and not representative of the California region as a whole.

This grant will fund the gathering of the data sufficient to forecast environmental and pollution related benefits associated with increasing alternative transportation. This effort will rely upon the expertise of many professionals as well as consulting firms to assemble existing information, determining where data does not exist to support this type of analysis, and establish methods for gathering the necessary information. The scale of future data collection will largely depend on the lack of availability of certain information.

4. Methodology for Assessing - Operational Efficiency and Financial Sustainability

a. Operational efficiency:

Currently, there is no region wide planning document which guides the development of alternative transportation in the National Forests of California. This planning grant is aimed at fulfilling this need, with a main objective to collaborate between all entities in the development of a region-wide transit strategy. Specifically, where routes are identified that indicate a readiness for taking the next steps toward further study or implementation of expanded transit, collaboration with affected agencies, transit providers, and stakeholders will be identified. This is expected to catalyze multi-agency and regional operational efficiencies as a direct result. And while there has been some coordination ongoing, without a single regional planning strategy for alternative transportation, having "regional, seamless, and sustainable transit" (INF TAG Report, 2007) will be impossible.

Before implementing any of the projects, this collaboration alone is likely to increase the operational efficiency of the various agencies/entities. The simple sharing of resources and discussions related to the development of future transit options will ensure that entities are being strategic in their use of financial resources. Perhaps more importantly, the addition of transit service to any area will be prioritized, and will have been shown to be a valuable addition to the overall transit program fit within the regional strategy. It is the expectation that this prioritization of future ATS will directly lead to increased operational efficiency.

Lastly, is the consideration of the efficiency lost over entire regions systems are not implemented. Determining values associated with loss in air quality, degradation of visitor experience resulting from congestion or other traffic related situations, or the loss in quality of the setting would be difficult to undertake. Even so, it can be reasonable to assume, based upon the current use and growth projections, the environment and recreation programs across California will become more negatively impacted and incur untold costs if alternative transit options are not explored and implemented.

b. Financial feasibility:

An investigation of potential local partnerships and funding will be made as a key step in this project. This analysis will include discussions with agency staff, as well as local and regional transit providers and other interested stakeholders. Possible sources of federal and non-federal funding sources to help subsidize an ATS will be identified, but will require further study. As the scale of this project is broad, it is meant to guide additional data gathering, including the need for feasibility studies. Financial feasibility will be a topic generally needing further detailed work. Funding strategies will be coarsely assembled for each of the "hot spots" and will include the identification of both initial and long-term costs.

c. Cost effectiveness:

Similar to financial feasibility, coarse statements may be made regarding the cost effectiveness of proposed routes. A formal review of fiscal operations will be necessary on a detailed basis for each of the routes, and will include descriptions of all anticipated revenues and expenditures, capital costs, operations and maintenance costs, and administrative oversight costs. This will need to be completed in future route/node specific planning efforts.

d. Partnerships and funding from other sources:

A number of very specific partnership opportunities will be cultured as part of this project. At key stages, various entities with a stake in providing the public expanded access through transit will be engaged. At first, orientation to the planning process and request for data will provide the first opportunity to sense partnership possibilities. Following the review of draft results, it is expected that more formal discussions of potential partnerships will begin. Throughout this effort, every effort will

be made to be transparent in the analysis of data, with the intent to build both trust and interest in working together.

Several large scale and strategic partnerships have already been forged that will play a role in this project. First, a great deal of interagency work is already being undertaken between Forests and National and State Park Units. This approach will be expanded as this project moves along, and will hopefully expand formal local partnerships into regional and/or statewide strategic partnerships. The effort to reach out to local and statewide governments will also be made as a part of this project, and will also hopefully become the basis for future strategic partnerships. By determining anticipated contributions to an ATS from each of the interested partners, the study will facilitate long-term transportation planning objectives. Additional stakeholders who have demonstrated interest in the implementation of an ATS in general include CalTrans, Bureau of Land Management, State and County Governments, and various Chambers of Commerce.